Life Science Materials

Item	Description	Quantity
Aquariums with Lids	Clear plastic boxes with lids for different studies. Aquariums measure: 8.5" H x 13" W x 7" D.	10
"Best of Bugs: Designing Hand Pollinators" Kit	This Engineering is Elementary unit allows students to explore the field of agricultural engineering, the role of insects in the natural system of pollination, and the technologies of hand pollination and Integrated Pest Management – Must have attended the EiE workshop for check out.	1
Carolina™ LED Light Box	Analyze gels under white or blue light. The powerful long-lasting dual LEDs give you increased options during gel staining and viewing. Durable molded polymer casing and compact footprint for easy storage.	3
Choice Chambers	This set of conjoined petri dishes (8 cm. diameter) can be used for choice experiments with small organisms such as pill bugs (not included).	10
Compound Light Microscopes	With transmitted and incidental light, this compound microscope is the perfect starter scope. View macro and micro specimens with 4X, 10X, and 40X objective lenses.	8 Microscopes and 1 Box of eyepieces and power chords
Cork Borer Set	Cork borers can be used to take samples for experiments when a constant diameter is required.	8
Dissecting Tool Kit	Includes: Surgeon's Scalpel with No. 22 Blade, Plastic-Handle Teasing Needle (Straight), Plastic-Handle Teasing Needle (Curved), 4-1/2" Surgical Scissors, 4-1/2" Fine Point Forceps, 6" Mall Probe and Seeker, 6 Dissecting T Pins, Transparent Vinyl Ruler, and Dropping Pipet.	9
Dissecting Trays	This aluminum pan will not rust and comes with a removable, re-sealable vinyl pad.	9
Evolution DVD Set Narrated by Liam Neeson	Evolution offers a groundbreaking and definitive view of the extraordinary impact the evolutionary process has had on our understanding of the world around us. Beginning with Darwin's revolutionary theory, this seven-part series explores all facets of evolution the changes that spawned the tree of life, the power of sex, how evolution continues to affect us every day, and the perceived conflict between science and religion.	1
E-Z Garden Kits	Bins contain lamp, plant tray, and PVC frame for indoor plant growth.	6
Fast Plants Monohybrid Genetics Kit	Students can explore Mendelian genetics through growing and pollinating F_1 hybrid plants to produce F_2 seeds.	2

Flinn Scientific Inc. Classifying Living Things Super Value Kit	Introduce your students to the six Kingdoms through the process of classification. Students view a set of illustrated cards and use simple, dichotomous keys to determine the appropriate Kingdom and phylum for each individual organism. In the process of classifying the organisms, students will develop an understanding of each individual's role in an ecosystem. A fun way for students to learn and understand biodiversity.	2
Internal Organs Mannequin	Mannequin of the head and torso of a human with removable internal organs.	1
Plant Light House	This 24" H x 19" W x 18" D nylon plant house can be used to grow plants in the classroom. It also has a built in butterfly screen to allow insects to share the house with your plants.	1
Magnifying Glasses	Basic, plastic magnifying glasses.	8
Mini-Skeleton	Thirty Three inch tall detailed human skeleton model.	1
Molecule Modeling Set (From Science Olympiad Protein Modeling 2016)	This set consists of molded balls of different colors and sizes along with connecting lugs of different sizes. This set is very helpful in modelling different organic and inorganic compounds.	12 portioned out Ziploc Bags, and 1 Box of Other Bits
Molymod® Advanced miniDNA Model Kit	The advanced miniDNA® system comprises color-coded, abstract-shaped parts designed to represent the nitrogenous bases, pentagonal sugar and pyramidal phosphate components needed to make a double-helix model of DNA. The three hydrogen bonds that connect Cytosine to Guanine and the two that connect Thymine to Adenine are represented by the appropriate number of pegs.	11 (12^{th} is currently in one of our display cases)
Molymod® Protein Synthesis Model Kit	The sugar group in RNA is ribose compared with deoxyribose in DNA. Ribose has more oxygen in the form of an OH group. This is represented by a darker red model piece. RNA is responsible for controlling the process of amino acid sequencing protein during synthesis. Each can be used to make a single strand model of messenger RNA carrying the genetic code (codons), and component parts to represent Transfer RNA and an amino acid. These can be used to demonstrate the process of protein synthesis known as translation.	9
Mr. and Mrs. Potato Head Set	These sets can be used as a lab aid during genetics activities.	9 of each
Nets (D-Nets)	Long handle nets for use with stream monitoring activities.	8

Nasco Nature Study Aid Kits	This set contains approximately 67 "True to Life" reproductions of the feet of wildlife, covering several species specially chosen to represent different families. The use of this set will make it possible for you and your students to identify these species and, through comparison, much of the other wildlife of this country.	5 Boxes Make-Up the Whole Kit
Onion, Fish, and *Ascaris* Mitosis Prepared Slide Set with Instruction Booklet	Set of slides includes both *Ascaris* mitosis and onion mitosis. Excellent for comparison of plant and animal mitosis.	2
Petri Dishes	Shallow, circular, transparent dish with a flat lid, which can be used to culture microorganisms.	3 Sleeves with ~20 in each
Polylab Atomic Model Set	This set consists of molded balls of different colors and sizes along with connecting lugs of different sizes. This set is very helpful in modelling different organic and inorganic compounds.	1
Protoslo	Protoslo® is a colorless solution in a 15-mL dropper bottle that slows the movement of protozoa to keep them in focus and in the field of view while preserving characteristic motion.	4 bottles (with 1 box of slides and 1 box of slide covers)
Protozoan Prepared Slide Set	Twelve slides selected to familiarize students with common protozoa.	1
Rubber Boots	Rubber rain boots in various sizes.	14 pairs
Slides and Slide Covers	Empty standard size microscope slides and slide covers to mount your own specimens.	3 boxes of each
Small World Thermal Light For Aquariums	Small lights that can be fixed to the top of an aquarium to provide light and heat to the organisms inside.	13
1 mL Transfer Pipettes	Narrow plastic pipettes that can accommodate up to 1 mL of liquid.	4 Bags of Varying Amounts
Wind-up Toys	Simple toys for studies in energy.	20 various
Wolf Box	Trunk full of activities, overheads, and games all about wolves.	1

Physical Science Materials

Item	Description	Quantity
Air Pucks	Air pucks glide across hard floors or low carpet, and feature a rubber bumper resulting in an elastic bounce off of solid obstacles. Ideal for demonstrations of Newton's First Law (Inertia), motion on an inclined plane, and collisions/conservation of momentum and energy.	8
Bubblelogy	Materials to change the diameter of bubbles and try to classify the shape of the bubble. (Box includes: trays, pitchers, buckets, combs, graduated cylinders and other materials to create bubbles)	1
Color and Light Box	Light activities including shadow puppets and color-by-number sheets. (Box includes: "William and the Magic Ring" a shadow casting story, film canisters, tube spectroscopes, color filters, old CDs, a prism and a book on shadow puppets).	1
Consumers Energy Saving Solutions Kit	Kit includes: "Shower Coach" timer, high efficiency shower head, digital refrigerator thermometer, 2 florescent light bulbs, student guide and a flow rate test bag).	1
Density Block Kits	Various metal cubes of equal volume	2
Dewer Flask	Container to hold liquid Nitrogen. Comes with gloves, scoop, and face shield. We have a 5L or 10L Dewer Flask.	1 Five Liter Flask 1 Ten Liter Flask
d-Stix	This 464 piece kit is a creative 3-dimensional construction set for engineers of all ages, featuring colorful sticks of various lengths and assorted connectors.	1 Set
Electric Bell Kits	This kit contains 11 smaller kits that allow the user to build a working bell and experiment with electromagnets.	1
Electronic balances	Ohaus Scout SPX balance maximum weight 220g reads to .01g	3
"Eye Wonders" Kit	A collection of optical illusions and visual effects that illustrate how your eyes and mind can sometimes see things that aren't really there.	1
Family Engineering Kits	Bins full of engineering activities/challenges for elementary grades.	6
Flinn Scientific Inc. Introduction To Magnets Student Laboratory Kit	Experiment with bar magnets to visibly see why magnets "stick" to certain objects, but not others. Test magnetic polarity, and determine what types of materials are magnetic and which are not magnetic. Visibly see how the magnetic fields are bent when two magnetic north poles repel, and when north and south poles attract. Includes complete laboratory instructions and background information.	1
Force tables	Tabletop force lab equipment with pulleys to measure angles of suspended weights.	8

Friction Board Sets	Various surfaces and two wooden blocks with hooks.	6
Gearios Amazing Machine Set	Gearios are gearblocks and gears that create robots, airplanes, helicopters, and so much more. By turning the gears, you make the structures spin, twirl, and roll.	3
GEMS Light-Color Analyzers Kit	Activities about light and color. (Box includes: colored film paper, light bulbs, worksheets for students, teacher guide, markers, and light fixtures).	1
GEMS Light-Optics Kit	Activities about how light works including a reflection activity. (Box includes: Teacher's guide, 3D glasses, 10 flashlights with batteries, black light bulb, prisms, colored reflecting screens, light pipe, flexible mirrors, and a color wheel).	1
GEMS Magnetism	Magnetism activities and supplies (Box contains: bar and circle).	1
Giant Train Whistle	Wooden, one foot long train whistle.	1
Hall's Carriage	Plastic carts to study forces and motion.	10
Hot Plates Ceramic Top	4"x4" Electric hot plates for heating solutions, etc.	6
Iron Filings	Jar of iron filings that can be used to demonstrate the direction of a magnetic field.	2
K'Nex	Large K'Nex education kit featuring designs for various amusement park rides.	1 Set in 6 Bins
Laser Pointers	Used in light optics and earth science activities.	4
Light Box With Color Wheels	Mix and match colors to see how light combines. Demonstrates primary and secondary light colors.	1
MagLev Design Kit	An Engineering is Elementary kit focused on learning about magnets and designing a MagLev Train. – Must have attended the EiE workshop for check out.	1
Magnetic Field Demonstration Instruments	This completely self-contained and simple to use demonstration set allows for three dimensional viewing of the magnetic lines of force.	6 Devices in 1 Bin
Magnetism Kit	This kit is full of different materials for activities involving magnetism.	1
Marble Ramps for Projectile Launch	Steel ramp that will deliver a marble at a steady speed from a given height.	2
Metric Weights	Each set includes 1 10 g, 2 20 g, 1 50 g, 1 100 g, 2 200 g, 1 500 g, and 1 1000 g weights. All weights are labelled and attached to a hook.	10
Mylar Light Mirrors	Flat, paper thin, and flexible mirrors.	1 Tube
Next Generation Science Exemplar (NGSX) Supplies	If you've experience NGSX, these supplies are great for creating a model of air pressure through several investigations (i.e. Air Puppies). Supplies include Biggest Sucker, Balloon Jars, Soap Bubble experiment, Atmosphere bar, etc.	Sets of 6

Optical Slits Apparatus Kit	Materials for making very fine single or double slits for studying diffraction and interference effects on light.	1
Parachute Design Kit	An Engineering is Elementary kit focused on learning about Parachutes – Must have attended the EiE workshop for check out.	1
Physical Science, Science Quests - Sound	This kit contains many different pieces that allow the user to explore different aspects of sound and answer questions such as: How do ears hear? Do things sound different underwater? How does a tuning fork work?	6
Plastic Beaker Set	Includes: 1000 mL Beaker, 500 mL Beaker, 250 mL Beaker, 100 mL Beaker, and 50 mL Beaker.	18
Pulleys	Plastic Pulleys - Single – 12 - Double – 12 - Triple – 13 Single Pulleys on Rods – 12	Total of 49 Different Pulleys
Ring Stands	Ring stands for use in various chemistry experiments.	10 with bases, 9 with table clamps.
Rubber Mallet	Small rubber hammer used to observe force.	4
Smashing Steel Sphere Demo Kit	When two 1-pound, 2-inch diameter, chrome steel spheres are smashed together, enough heat is generated at the point of contact to burn a hole in a piece of ordinary paper! This amazing demonstration graphically illustrates the conversion of mechanical energy into heat energy. Although there are no flames, a charred hole appears along with the odor of burnt paper. The kit contains two steel spheres and instructions.	1
Sound Activities	Activities on how sound travels. (Box includes: worksheets, benchmarks, a teacher guide, “telephone,” glass bottles, shakers, and rain sticks.)	1
Sound Tubes	When spun in a circular motion, these tubes produce a tone. As the Sound Tubes are spun faster, the tone steps up in frequency.	4
Spectroscope Kit	This kit contains six spectrum tubes that allow the user to analyze light by separating it into its various color components. These tubes give the best results when used with incandescent lamps, fluorescent lamps, open flames, sunlight, and gaseous discharge tubes.	1
Spring Scale	A type of weighing scale that consists of spring fixed at one end with a hook to attach an object at the other.	Seven 5N Scales Seven 10N Scales Seven 20N Scales Seven 25N Scales

Straw Rocket Launcher	Students can build their own straw rockets and test them on the Straw Rocket Launcher. Just like early rocket pioneer Robert Goddard, they can conduct scientific experiments by varying the trajectory angle and launch energy. These rockets can travel up to 50 feet! The Straw Rocket Launcher uses pneumatic force created by releasing a weighted drop rod in the cylinder to launch rockets. The force of the launch can be controlled by varying the release height of the rod.	2
Syringes	Large plastic syringes for pressure demonstrations	12
Tumble Buggies	The Original Tumble Buggy Car is nearly unstoppable! These can be used for constant velocity experiments or to study other motion related phenomenon.	8 Red and 8 Blue
Truss Boom	Useful for studying the Law of Composition of Force. Also good for student exploration in compressions, tensions and the fundamental principles of mechanics.	10
Wacky Factory	Children create an intricate maze of colorful interlocking and spinning gears that turns out looking like the magical machinery in Willy Wonka's Chocolate Factory. The building process is easy and certainly a big part of the creative pleasure children will find in this toy. The written instructions will be challenging for many children under 9 years old, but once adults show children how to get started, kids should have no problem taking off with their own factory plans.	6
Wind-up Toys	Simple toys for studies in energy.	20 various
Wooden Blocks with Hooks	Pre-made wood blocks with smooth, varnished surface 2”x4”x6” used for various friction and mass labs	8

Earth Science Materials

Item	Description	Quantity
Starlab Portable Planetarium (digital and traditional starlabs available)	A teaching aid geared toward astronomy. An air-inflated dome made out of vinyl, and a projector, which displays images on the inside of the dome. The projector produces bright light, which is fully adjustable by the user. Cylinders can be swapped out to teach a variety of astronomy, earth science, and social studies lessons. Cylinders To Choose From: - Weather - Celestial Coordinates - Lewis and Clark - Plate Tectonics - Solar System and Galaxy - Deep Sky Objects - Star Field - Greek Mythology - Native American Folklore	2
Astrolabes	Instruments used to make astronomical measurements (typically of the altitudes of celestial bodies), and in navigation for calculating latitude. Consists of a disk with the edge marked in degrees and a pivoted pointer.	2
Black Hole Toolkit	Box includes: two green buckets, marbles, a softball, black fabric, large rubber bands, Teacher training video, and hand-outs for students.	1
Coghlan's Liquid Filled Map Compass (Unopened)	Features include a see-through base and rotating, liquid filled housing. Base contains scales in inches, millimeters and 1:25,000.	12
Compasses	A compass is an instrument used for navigation and orientation that shows direction relative to the geographic "cardinal directions", or "points". - Large Size – 15 - Medium Size – 24 - Small Size – 68 - Mini Size – 31 - Compass Activity Bag – 1	Total of 138 Compasses of Varying Sizes
Constellation Box	Includes: - 1 Flashlight - Batteries - 18 Different Constellation Lenses	2
Eclipse Shades	Eclipse Glasses filter out 100% of harmful ultraviolet, 100% of harmful infrared, and 99.999% of intense visible light. Use them to safely view a solar eclipse - or to sun-gaze any time the mood hits!	10

Garmin eTrex Legend Handheld GPS Units	The brightly colored eTrex Legend combines all of the intuitive, user-friendly features of the eTrex series with a full basemap of the Americas, the Atlantic or the Pacific and 8 megabytes (MB) of internal memory for storing optional maps. The Legend can receive position corrections from the Wide Area Augmentation System (WAAS), which makes Legend's already-accurate positioning data even more reliable. In fact, when you turn on WAAS, you can increase the accuracy of Legend's position reporting to within three meters.	6 GPS Units and 4 Instruction Booklets
Garmin eTrex Vista Handheld GPS Unit	This popular handheld navigator has a bright color screen, barometric altimeter, electronic compass and microSD™ card for expandable memory, and it can route you on roads or off, for wherever your travels take you.	18 GPS Units and 19 Instruction Booklets
Garmin GPS V	The GPS V is one versatile navigator that delivers automatic routing, detailed mapping and WAAS capability — all in a compact handheld GPS. It comes with the MapSource® City Select CD, which gives you access to detailed street-level maps with locations of restaurants, hotels and other services.	10 GPS Units and 8 Instruction Booklets
Garmin GPS II – Plus (with case)	Featuring a 12 parallel channel receiver for quick satellite acquisition and enhanced reception, the GPS II Plus is designed to track any over-the-road journey and offroad adventure you have in mind.	1
Garmin MAP78 Handheld GPS	Handheld GPS units featuring high-sensitivity GPS with HotFix®, 1.7 GB internal memory, microSD slot, worldwide basemap, and up to 20 hours battery life.	11
Garmin GPS Accessories	- Cases – 23 - Belts that cases can be fixed to – 18 - Computer connecting cables - 22	
***GEMS Stories in the Stone**	Activities about rocks including classification and creating crystals. (Box contains: Samples of various kinds of rocks, Crystal Solution “recipe,” and a teacher guide.)	1
Groundwater Flow Kit	Demonstration box that allows water to circulate through soil layers and demonstrate how pollution can move	3
Globes (inflatable)	Inflatable models of the earth.	8
“How Clean is the Air?”	Kit includes materials and lessons on how to test the air. (Kit includes: pH paper, vinegar, Bromothymol Blue, Nitrogen Oxide test fabric, magnifying glass, pipets, limestone samples, tubes and a work booklet)	2
Lamps (light/heat)	Ceramic light socket reflecting shield and mounting spring clip.	8
Laser Pointers	Used in light optics and earth science activities	4

Map Measuring Tool	Use this device to measure the distance between points on a map.	2
Mars Model	Plush model of the planet Mars with various labelled regions, craters, etc.	1
Nets For Stream Work	D-Nets and round nets for collecting insects in streams.	15 Six Foot Nets 15 Three Foot Nets
Planet Slides and Projector	For use inside the StarLab to show images of planets that are in the night sky.	2
Rain Gauge	Used to collect and measure how much rain falls.	3
Shadow Toolkit	Bins containing equipment to study light and shadows. Fun lesson ideas and needed equipment included.	9
Stereoscope	A device in which two photos of the same object that were taken at slightly different angles can be viewed together thus creating an impression of depth and solidity.	8
Stream Tables	For the study of erosion and riverbeds.	4
Styrofoam balls with stick	Ideal for studying moon phases.	Class set
Sunspotter	Solar telescopes for observation of sunspots and solar rotation.	6
Topographical Map Kit	Includes clear overlays, plastic land features, and maps. Ideal tool for showing contour lines.	1
Water Cycle Model	Kit contains plastic land features and demonstrates the water cycle and runoff, and comes with lesson sequence.	1
Water Runoff Demo Tables	Great for class demonstrations or small group work to study water runoff. Kit includes activities and materials to simulate pollutants on the table.	2
World Map White Boards	11”x14” whiteboard with countries of the world and latitude/longitude coordinates.	15